



The WFTDA IGRF and Standardized Stats Calculator

StatsBook Manual

5th Edition for Use with the 2019 January 1 StatsBook

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Overview

The WFTDA IGRF & Standardized Stats Calculator (also called the StatsBook) is a complex Excel workbook made up of many worksheets which are used to capture game data and compute game, team, and player statistics. This manual provides information and recommendations to follow for optimal use of the StatsBook. Large portions of the StatsBook will fill in automatically if you enter the data in the correct order. To do that requires the data be gathered in-game properly, which can be helped by following recommended pregame procedures. This manual presents the methods to be followed for all of these situations.

To create role instructional guides for a Non-Skating Officials crew, the entire In-Game Procedures section of this manual is designed to be printed as a duplexed (2-sided) whole; These may then be laminated for use throughout the crew's entire season.

- The In-Game **IGRF** procedures should print as a single duplexed page.
- The In-Game **Score** procedures should print as two (2) duplexed pages.
- The In-Game **Penalties** procedures should print as a single duplexed page.
- The In-Game **Lineups** procedures should print as two (2) duplexed pages.
- The In-Game **Penalties-Lineups** procedures should print as a single duplexed page.
- The In-Game **Expulsion-Suspension Form** and **Official Review** procedures should print as a single duplexed page.
- The In-Game **Game Clock** procedures should print as a single duplexed page.
- The In-Game **Penalty Box** procedures should print as a single duplexed page.
- **Note:** This manual is not intended to cover all aspects of being an excellent Non-Skating Official; its purpose is correct use of the StatsBook and its in-game paperwork only. Any mention of sanctioning refers to WFTDA Sanctioning, and its policies and procedures. For those using the StatsBook for other roller derby organizations' events, refer to the relevant organizations own sanctioning policies and procedures.

Pregame Paperwork Setup

It is a good idea to create your own copy of the StatsBook, which you have adjusted for proper printing from your computer to your printer. Different combinations of operating systems, software, printers, and print drivers will cause page breaks and margins to shift.

Save As with Correct Filename

You will need to start a new StatsBook for each game if you are preparing paperwork for multiple games. Go back to your StatsBook file, enter the data for each game and then Save As with a new filename so that you don't save over your blank copy of the StatsBook.

As mentioned in the Read Me tab of the Statsbook, the name of the file should be of the form:

STATS-YYYY-MM-DD_HostLeague_vs_VisitorLeague.

Example: STATS-2018-01-25_ToasterTownRollerDerby_vs_WaterCityRollers

If you save it with the correct name now, it will save you time later.

Entering Data Pregame

Fill in as much of the Interleague Game Reporting Form (IGRF) Section 1 as you can, before printing any of the sheets.

- The Game # field is very flexible, regarding the data it will accept, which can ease juggling multiple sets of paperwork on game day. The following are all examples of valid data (A, B, J1, J2, W1, W2, M1, M2, 1, 2, and multiple digit numbers) which may be entered. If A or B is entered in this field, the League Names from the IGRF are combined with this data in some sheets' header information (e.g., Toaster Town A), all other variations of this data will just show up as the game number in the heading.
- The start time is the scheduled game start time.
- Enter the league and team names. To keep data consistent, please enter the complete league name. If the team does not have a separate name from the league, enter the league name for both the league and the team name.
- If the way Officials will call the jersey color for a participating team is known in advance, that information may be entered in the IGRF sheet and it will populate throughout the rest of the StatsBook.

Enter the most critical part of the IGRF, the Team Rosters (up to 20 Skaters per team). This section will populate the roster data into other sheets in the StatsBook. The rosters need to be entered according to a specific set of guidelines, in ascending alphabetical order [0-9] by Skater roster number. Double-check entry of any numbers which should have leading zeros.

- For regulation games only: Skater roster numbers may include letters in regulation games, but not in sanctioned games. Use an alphanumeric sort order [0-9, A-Z] for a regulation game roster; a team with Skater roster numbers K1LL, 4K, 400, 9, 45 would sort as 400, 45, 4K, 9, K1LL.

The Skater roster numbers should be sorted in alphabetical order, following a set of simple rules that can make it quite manageable.

- Think of the characters in a Skater's roster number as individual words: 100 is "One, Zero, Zero".
- Sort the Skater roster numbers as you would alphabetize words,
- A number with more characters does not necessarily come after a shorter number. 4 would appear after 3000 in the sort since when you alphabetical sort, the first characters are compared rather than all the characters. 3000 comes before 4 just as Antelope is alphabetically before Bee. That antelope is a longer word doesn't matter since antelope starts with A and bee starts with B. The word starting with A comes before every word starting with B just as every number starting with 3 comes before every number starting with 4.

If a team submits a roster with the following numbers:

4, 5, 55, 400, 733, 007, 10, 247, 65, 33, 00, 13, 925, 2, 765, 7, and 45.

That roster would be sorted into this order:

00
007
10
13
2
247
33
4
400
45
5
55
65
7
733
765
925

Be certain to use the Skater's name as it appears on the approved charter for sanctioned games.

The Skater names will appear in the Game and Penalty Summary sheets, as well as the Whiteboard sheet. Using exact charter names is useful for the Sanctioning submission process, and makes certain the game paperwork and StatsBook will match Skaters' preferences.

If you know the roster of Officials for the game in advance, fill out the roster in section 4 of the form. A standard list of Officials' roles is pre-filled on the IGRF. These can be removed, changed, or added to as necessary based on the requirements of the game, however "Head Non-Skating Official" and "Head Referee" should remain in their current locations to allow pre-population on other sheets in the document.

Use Paste Special, not Paste

Your data may have arrived via another electronic source. To import data from another source or move it around within the StatsBook, use the Copy and "Paste Special... Value" commands.

Warning: The standard Paste command may cause changes to certain cell settings the StatsBook relies upon, which may result in undesired results, errors, and extra troubleshooting. Dragging and dropping data or cutting and pasting is very likely to cause serious errors, particularly with roster information.

Excel keyboard shortcuts to open the Paste Special dialog box:

- Win: Control+Alt+v, then click the Value radio button. Click OK.
- MacOS: Control+Command+v, then click the Value radio button. Click OK.

Hint: An easy way to determine if you have made an error in pasting data to the IGRF sheet is to look on the Game Summary sheet, and check the rosters for both teams there. If the # column in Game Summary displays an error (#REF!), that means that the roster has been entered incorrectly and the StatsBook will not properly display this roster information. Undo (Ctrl+z or Cmd+z) the roster entry to try again.

The date, game # data, league (and possibly team) names, color, and roster data will be populated automatically into the other sheets you will need for the game.

You should NOT enter data onto the other sheets before the game.

Printing Game Paperwork

Once you have the IGRF filled out, you are ready to print out your sheets for the game. Remember to Preview before you print, to ensure that margins and page breaks are still as expected.

Your exact needs for paper copies of the sheets may vary depending upon your staffing situation, but at a minimum you will need to print:

- The **IGRF** sheet. It should print as two (2) pages.
- The **Score** sheet. It should print as four (4) pages—one for each team for each period.
- The **Penalties** sheet. It should print as two (2) pages.
- The **Lineups** sheet. It should print as four (4) pages—one for each team for each period.
- The **Expulsion-Suspension Form** sheet. You may not use these in most games, but you should be sure to print a few copies of the form if you do not have any extra ones from previous games.
 - Printing Expulsion-Suspension Form sheets from a blank StatsBook will use Home Team and Away Team as the identifiers on the sheets. This will be much more economical for possible re-use, but you should be careful to write in the League and Team Names when using the form. See the In-Game Procedures for more detail.

If your staffing situation permits, you may also want to print the following:

- The **Penalties-Lineups** sheet. It should print as four (4) pages—one for each team for each period. If you choose to staff this position, it is not necessary to print the individual **Penalties** and **Lineups** sheets as well. There are two options for the method of completing this paperwork (described in the In-Game Procedures section), should you choose option 2, it will be necessary to also print the **Penalty Box** paperwork for the game.
- The **Penalty Box** sheet. It should print as four (4) pages—two per team. In a low-penalty game, the second sheet for a team may remain unused.
- The **Official Reviews** sheet. It should print as two (2) pages and it has space for all potential Official Reviews in a single game.
- The **Rosters** sheet. You may choose to not use this sheet or may have no need for this sheet however having extra rosters available is recommended. They can be useful for providing rosters to Scorekeepers, announcers, as well as for whiteboards.
- The **Game Clock** sheet. It should print as two (2) pages.

You may also choose to print and use these optional print-only sheets that were designed for use at multi-game events and tournaments and are populated with data from the IGRF:

- The **Paperwork Envelope** sheet. It should print as one (1) page. This is a cover sheet that provides a summary of game information. It can be used by the Head NSO (Tournament Head or Crew Head) or GTO at pregame meetings to provide information and take notes on common pregame discussions.
- The **Eval Notes - NSO** sheet. It should print as one (1) page. This is a roster of all the NSOs from the IGRF that provides space for game information and notes about each Official that may be useful for a Head NSO, GTO, NSO Alternate, or anyone else observing a game with the intention of providing feedback either informally or to Officials' Certification.
- The **Eval Notes - Referee** sheet. It should print as one (1) page. This is a roster of all the skating officials from the IGRF that provides space for game information and notes about each Official that may be useful for a Head Referee, GTO, Referee Alternate, or anyone else observing a game with the intention of providing feedback either informally or to Officials' Certification.

You should NOT print out the Game Summary, Penalty Summary, or OS Offset sheets before the game.

In-Game Procedures

These procedures cover activities that need to happen during game play to properly document and officiate the game as well as paperwork that must be addressed immediately before and after the game.

IGRF

- **Section 1 - Venue & Rosters:** Location, tournament (if applicable), and date information should be printed with the sheet. If the printed sheet does not already have it, write them in.
- **Start Time:** Time information should be printed with the sheet. If not, write in the start time.
- **Suspension:** Provides suspension-related information for Sanctioning. Circle YES if a Suspension was served or recommended. Circle NO if there was an Expulsion, but no Suspension was recommended. Leave untouched if there was no Expulsion or Suspension activity in the game.
- **Team Rosters:** Before the game, indicate any changes (additions or removals) and alternates on the team rosters. Removals should be indicated by crossing out the Skater's number and name with a clear, bold line. (All changes should also be noted on the Penalties, Lineups, and Penalty Box sheets.) Knowing who did not skate for a team will be important for data entry.
- **Section 2 - Period (1/2) Points:** At the end of each period, record the total points for each team.
- **Period (1/2) Penalties:** At the end of each period, record the total penalties for each team.
- **Total Points:** Record the total number of points for each team at the end of the game. This should be the same as Period 1 Points + Period 2 Points.
- **The Official Score in this game required adjustment:** If an adjustment to the Official Score was made, write 'yes' in this field. Provide a description of the reason for this adjustment in the appropriate field.
- **Total Penalties:** Record the total number of penalties for each team at the end of the game. This should be the same as Period 1 Penalties + Period 2 Penalties.
- **Expulsion/Suspension Notes:** Any expulsions issued during the game should be noted in Section 2. This must include: team name, Skater roster number, the period and Jam when the penalty occurred, the penalty name the expulsion was issued for, and if a suspension was recommended. If an expulsion occurs during the game, that also must be documented with the Expulsion- Suspension Form. See the [WFTDA Expulsion and Suspension Policy](#) for the complete process for submitting forms and requesting suspensions.
 - Also use this space to indicate a suspension being served by a Skater during a sanctioned game. Include the Skater's complete charter name and roster number.
- **Section 3 - Verification:** Both teams' Captains, the Head Referee and Head NSO for the game must all sign here once all other parts of the form have been completed.
- **Section 4 - Roster of Non-Skating Officials/Stat Trackers/Skating Officials:** Before the game, indicate any changes, additions, or removals on the roster.

After the Game at the Venue

Complete the IGRF, and gather the signatures of both teams' Captains, the Head Referee and Head NSO in Section 3. Tracking them down later is much more difficult.

For WFTDA-Sanctioned games only:

- Remember to scan or photograph all pages of the signed IGRF and any signed Expulsion-Suspension forms that were used for a WFTDA sanctioned game.
- The host team follows the timeline and process for submitting required sanctioning data described in the [WFTDA Sanctioning Policy](#).
- Information and locations for score reporting and required data submission are available at <https://wftda.org/sanctioning/scores>
 - The required sanctioning data from a game includes:
 - Scores
 - Scanned signed IGRF (and scanned signed Expulsion-Suspension Form and scanned Official Reviews, if any.) Photographs of all docs are accepted.
 - Completed StatsBook file

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Score

- Form Header: Fill in the Scorekeeper and Jammer Referee names at the top of the form. If the printed sheet does not already have it, also fill in the team names, team colors, and date.
- **JAM:** (Jam Number) Write in the Jam number at the beginning of each Jam, starting at 1 each period. Do not write in more than one Jam number at a time, as you may need to track Star Passes. Overtime Jams continue the numbering of the second period, so if Period 2 had 25 Jams, the Overtime Jam would be written as Jam 26.
 - During a Star Pass: Move down to the next line and write "SP" in the JAM column, start tracking the rest of the Jam in the new SP line.
 - During a Star Pass for the Opposing team: Move down to the next line and write "SP" in the JAM column, but continue tracking the rest of the Jam in your original Jam number row. If the team you are tracking also has a Star Pass that Jam, move down to the SP line and continue tracking in the SP line. At the end of the Jam, if the only Star Pass that happened was by the opposing team, add an * to the JAM column (should read "SP*") and leave the rest of the row blank, except for the Jam Total (enter as 0) and Game Total. The * means that the other team passed the star and the Scorekeeper did not forget to fill in the information on the SP line. It is also important to do this for the StatsBook workbook to calculate correctly. Both teams must use the same number of lines on the Score sheet. If both teams had a star pass in the same Jam, there should not also be an SP* line for that Jam.
- **Jammer's Number:** Write in the roster number of the Jammer for that Jam.
 - During a Star Pass: Write the roster number for the new Jammer on the next line down, which should have "SP" in the Jam column.
 - During a Star Pass for the Opposing Team: Leave SP* line blank
- **Lost:** (Lost Lead/Lost the ability to become Lead) Mark with an X when a Jammer loses the ability to become Lead Jammer or loses Lead Jammer status itself. Do not mark this box if the Jammer is eligible but the opposing Jammer is declared Lead Jammer status first.
 - Situations where "Lost" should be marked:
 - Jammer removes helmet cover after start of Jam, but before Lead is declared.
 - Jammer earned Lead, but removes helmet cover, commits a penalty, or otherwise loses Lead status.
 - Jammer commits a penalty and goes to the Penalty Box before Lead is declared.
 - Jammer exits the Engagement Zone at the end of the Initial Trip and the Jammer Referee signals not Lead, even though Lead has not yet been declared.
 - During a Star Pass: If the original Jammer was Lead or Lead had not yet been declared when the Star Pass occurred, mark this column with an X in the original Jam number row. Do not write it in the SP line.
 - During a Star Pass for the Opposing Team: Leave SP* line blank

- During an Overtime Jam: Neither Jammer is eligible for Lead during an overtime Jam. Leave blank.
- **Lead:** (Lead Jammer) Mark with an X if the Jammer Referee signals that the Jammer is Lead.
 - During an Overtime Jam: There will be no Lead Jammer, leave blank.
- **Call:** (Called Jam Off) Mark with an X when the listed Jammer successfully calls off the Jam before Jam time ends Do this for every call off, whether or not the Jammer called it off legally.
- **INJ:** (Jam Called for Injury) Mark with an X if the Jam is called off for injury before the natural end of the Jam. This applies to any injury that happens, no matter what position the injured person is playing, what team they are on, and includes Jams called for injured Officials.
- **NI:** (No Initial Trip Completed) Mark with an X if the Jammer does not complete their Initial Trip by the end of the Jam. Do not enter any score in the Trip 2 column.
 - During a Star Pass: If the original Jammer you are tracking is still on the Initial Trip when they complete a Star Pass legally, mark this column with an X in the original Jam number row. If the new Jammer also does not complete the Initial Trip, then mark the NI column in the SP line as well. If the new Jammer does complete the Initial Trip, leave the NI column blank on the SP line and track points as described under Trip 2-10 During a Star Pass (see below).
 - During a Star Pass for the Opposing Team: Leave SP* line blank
- **Trip 2-10:** (Scoring Trips) After the Initial Trip is complete, write the points for each scoring trip, as the Jammer Referee signals them, in the column for the appropriate trip. The next trip starts when the Jammer exits the front of the Engagement Zone. Write points for any trip that has started, even for 0-point trips.
 - During a No Initial Trip: If the Jammer does not complete the Initial Trip during a Jam, mark the NI field with an X; leave all of the Trip columns blank.
 - During a Star Pass: The new Jammer picks up on the trip where the original Jammer left off, so if you have marked points for a trip for the original Jammer, when the new Jammer scores, write the points on the SP line under the next trip. Only write points when the Jammer Referee has signaled points at the end of a Jammer's trip. This means you should mark all points scored on the scoring trip of a Star Pass for the new Jammer.
 - During a Star Pass for the Opposing Team: Leave SP* line blank.
 - More than 9 Scoring trips: If a Jam has ten or more scoring trips write them in the Trip 10 column as: [ninth Scoring Trip pts] + [tenth Scoring Trip pts]+...
 - During an Overtime Jam: Write the score for the first trip in the Trip 2 column as such: [Initial Trip points] + [second trip points].
- **Jam Total:** Write the total number of points scored during that Jam.
 - During a Star Pass: Add up the original Jam number row and the SP line separately and write the Jam totals on their respective rows.
 - During a Star Pass for the Opposing Team: The Jam Total should be 0 points in the SP* line.

- **Game Total:** This is the running total of points for the game. Add the current Jam Total to the Game Total from the previous Jam.
 - During a Star Pass: Add the Game Total for the original Jam number row and the SP line separately, and put the Game Totals on their respective rows.
 - During a Star Pass for the Opposing Team: The Game Total for the SP* line should be the same as the row above it.
- **Period Totals:** Calculate the Jam Total and Game Total values at the end of the period and give them to the Head NSO for the IGRF. Jam Total should be the total number of points scored in each individual Jam (of the period). Game Total should be the total number of points earned for the entire period. After Period 1, the Jam Total and the Game Total should both be the same. At the end of the game, the combined Period 1 and Period 2 Jam Totals should match the final Game Total.
 - Optional confirmation: To double-check a period's total score, add up the total points for each trip for the whole period and write those totals in the Period Totals row, then add up all of the trip totals, which should equal the same number as that period's Jam Total.
 - Optional tallies: It is not necessary to tally the total number of marks in the Lost, Lead, Call, INJ, or NI columns or the total number of Jams in the Period Totals row, but it should not be considered incorrect to do so.
- Halftime responsibilities:
 - At the beginning of Period 2, write the Period 1 Game Total into the field at the top of the Period 2 form, in the Game Total column.

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Notation Examples for Score

For any examples showing both teams, Blue team will be on top, Red below.

- Blue 125 earns Lead Jammer, scores points, then passes the star to Blue 50 during trip 3. No Red Star Pass.

2	125	X	X														4	8		
SP	50																4	3	7	15

2	7253																4	4	0	8	18
SP*																				0	18

- Lead is available. Blue 125 is unable to complete the Initial Trip, and they pass the star to Blue 50, who is also unable to complete the Initial Trip.

2	125	X																		0	4
SP	50																			0	4

- Lead is available. Red 7253 is unable to complete the Initial Trip, and they pass the star to Red 513, who completes the Initial Trip and scores points until the end of the Jam.

2	7253	X																		0	10				
SP	513																			4	4	4	2	14	24

- Both teams pass the star in the same Jam.

2	125	X	X																	0	4			
SP	50																			4	4	0	8	12

2	7253																			4	4	4	12	22	
SP	513																					4	2	6	28

- Blue 125 earns Lead Jammer, scores 4 points on Trip 2, then after exiting the front of the engagement zone calls off the Jam before scoring points on Trip 3.

2	125	X	X																	4	0	4	8
---	-----	---	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	---	---	---

- Jam 2 is called for injury on a Blue Blocker.

2	125	X	X																	3		3	7
---	-----	---	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	--	---	---

2	7253																			1		1	11
---	------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	--	---	----

- Blue 125 earns Lead Jammer and calls off the Jam before exiting the Engagement Zone.

2	125	X	X	X																0	4
---	-----	---	---	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	---

- Period 2 ends with a tied score, so Jam 23 is run as an overtime Jam. Both teams score points on Trips 1 through 4 until the Jam ends.

23	42																			4 + 4	4	1	13	250	
23	71																			4 + 4	4	4	0	16	253

Penalties

- Form header: Fill in the Penalty Tracker name at the top of the form. If the printed sheet does not already have it, also fill in the team names, team colors, and date.
- #: (Skater Number) All of the Skaters' jersey numbers should be pre-populated for both teams and already sorted in alphanumeric order, [0-9, A-Z].
- **Penalty/Jam #:** Starting on the left side of the row, write the penalty code in the top row and Jam # in the bottom row for each Skater. Any penalty past the dark line (7 or more) should result in a Foul Out.
 - Write the Jam in which the penalty occurred on the Penalties sheet, regardless of what Jam the penalty is served.
 - If a Skater receives a penalty between two Jams, write the Jam number of the Jam in which the Skater was participating. For example, write a Blocker's Late Hit in the previous Jam, but an Early Hit while lining up for a Jam in the upcoming Jam.
 - Write any Delay of Game penalties for the upcoming Jam, which is the Jam that is being delayed by that penalizable action. If a Delay of Game penalty is not issued until after the start of a Jam, then write the penalty for the upcoming Jam.
- **Non-Skater Expulsions:** Write penalties associated with the expulsion of a non-skating member of the bench staff (which are not otherwise assigned to the team Captain) here. Write the name of the bench staff member in the shaded block and the penalties in the same way as the rest of the Penalty/Jam # section.
- **FO/EXP:** Write Foul Outs (FO) for accumulated penalties as "FO" in the top row and the Jam in which you recorded the 7th penalty in the bottom row. For expulsions, write the appropriate penalty code in the top row and the Jam when the penalty occurred in the bottom row. You must also write expulsion penalties in the Penalty/Jam # section for that Skater.
- **Total:** At the end of each period, add the number of penalties for each Skater for that period and write it in the Total column. Do not add anything from the FO/EXP column to the Total.
- **Total Penalties for Period:** Add together all of the individual penalty totals above and the Non- Skater Expulsions on the side to make the team's penalty total for the period.
- **Notes:** The numbers are an optional way to easily track the current Jam. Use the rest of the area for notes as needed.
- Halftime responsibilities:
 - Before Period 2, transfer the penalties from Period 1 by shading in the same number of fields of the Period 2 sheet.

Notation Examples for Penalties

1. Blue 125 fouls out in Period 2, Jam 6 (both periods' penalties are shown here).

125	<i>X</i>	<i>C</i>	<i>I</i>	<i>X</i>	<i>M</i>							5
	4	4	4	8	9							
125						<i>C</i>	<i>P</i>				<i>FO</i>	2
						4	6				6	

2. Red 513 is expelled for a high block in Period 1 Jam 20.

513	<i>X</i>	<i>L</i>	<i>A</i>								<i>A</i>	3
	2	14	20								20	

3. Bench coach is expelled for misconduct towards an Official in Jam 10.

Non-Skater Expulsions	G	
<i>Coach Z</i>	10	

The rest of this page is otherwise intentionally blank (for pagination purposes).

Lineups

- Form header: Fill in the Lineup Tracker name at the top of the form. If the printed sheet does not already have it, also fill in the team names, team colors, and date.
- **Team Roster:** The roster should be pre-populated with the Skater roster numbers and names
- **Jam:** The number of the Jam. Do not write in more than one Jam number at a time, as you may need to track Star Passes.
 - During a Star Pass: Move down to the next line and write "SP" in the JAM column, start tracking the rest of the Jam in the new SP line.
 - During a Star Pass for the Opposing team: Move down to the next line and write "SP" in the JAM column. Continue tracking the rest of the Jam in the original Jam number row. If the team you are tracking also has a Star Pass in that Jam, move down to the SP line and continue tracking the Jam in the SP line. At the end of the Jam, if the only Star Pass that occurred was on the opposing team, add an * to the JAM column (should read "SP*") and leave the rest of the row blank. The * means that the other team passed the star and the Lineup Tracker did not forget to fill in the information on the SP line. It is also important to do this for the StatsBook workbook to calculate correctly. Both teams must use the same number of lines on the Lineups sheet. If both teams had a star pass in the same Jam, there should not also be an SP* line for that Jam.
- **No Pivot:** Mark this box with an "X" if the team does not field a Pivot for the Jam. Then write one of the Blocker's number in the Pivot column.
 - During a Star Pass: Mark this box with an X, because the original Jammer is now a Blocker and the Pivot is now a Jammer, meaning there is no longer a Pivot in the Jam.
 - During a Star Pass for the Opposing team: Leave SP* line blank.
- **Jammer / Pivot / Blocker:** Write the roster number of each Skater in a box that matches their position. If the team does not field a Pivot, then the Pivot column contains a Blocker's number.
 - If the team is skating short: When there are fewer than 4 Blockers/3 Blockers and a Pivot on the track or in the Penalty Box, write "n/a" in the box for each missing Skater. Include additional information about the scenario in the margin if needed.
 - If the team fielded a full pack, but the Lineup Tracker didn't record a number for one or more Skaters, write "?" in the box for each Skater that participated in the Jam but was not recorded.
 - During a Star Pass: On the SP line, write the new Jammer in the Jammer field, and write the former Jammer in the Pivot field. Copy the remaining Blockers from the line of the current Jam number (the line above the SP line)
 - During a Star Pass for the Opposing team: Leave SP* line blank.
- **Box:** There are three of these fields for each Skater. Use them to track Penalty Box trips (when the Skater entered, was in, or exited the Penalty Box) and for tracking injured Skaters if a Jam is called for injury. There are three fields for each Skater for writing this information. If you need more than three boxes in a single Jam, write the additional information in the margin.

The Penalty Box Notations

3 - Shows the Jam was called as a result of an injury to the Skater, or the Skater in the Penalty Box required a substitute for any reason (e.g., injury, skate, or equipment malfunction), then that Skater may not be fielded until after 3 more Jams have occurred.

- - Shows the Skater sat down in the Penalty Box during the Jam. Use this only when a Skater sits in the Penalty Box and begins their penalty service during the Jam. Do not use it if a Skater is on their way to the Penalty Box and the Jam ends. If a Skater is put into queue, do not write they are in the Penalty Box until they are actually sitting and begin their penalty service.

S - Shows a Skater sat between Jams or is continuing Penalty Box service. Use this if a Skater starts the current Jam sitting in the Penalty Box, including when they were in the Penalty Box at the end of the previous Jam. Also use this notation in the SP line if a Skater is in the Penalty Box when their team passes the star, or if there is a substitute who is continuing to serve another Skater's penalty, such as for injury, a foul out, or an expulsion.

+ - Shows that a Skater completed their penalty service (was told "Done" and released) during the same Jam that they entered the Penalty Box during, modifying the - notation by crossing it with a | to make a +. Use this notation for a Skater who fouls out or is expelled, and their penalty service time ends during that Jam.

\$ - Shows that a Skater was in the Penalty Box at the beginning of the Jam and completed that service during that Jam. This modifies the S notation that showed the Skater sat between Jams or was continuing service from a previous Jam by adding a | to make the \$.

Notation Use During Star Passes

During a Star Pass: Write all Penalty Box entrances and exits on the line for the current Jammer.

- If a Skater is in the Penalty Box when their team passes the star, mark them with an I notation on the SP line to show that they are continuing in the Penalty Box from before the Star Pass. Mark any additional Penalty Box exits and entrances using the usual notation in the SP line as well.
- During a Star Pass for the Opposing team: Leave SP* line blank.

Halftime responsibilities: Transfer any Skaters who will start Period 2 in the Penalty Box to the Period 2 sheet.

Notation Examples for Lineups

1. Blocker 87 sat in Jam 2, their time completed during Jam 2.

2		125			50			87	+			34			911		
---	--	-----	--	--	----	--	--	----	---	--	--	----	--	--	-----	--	--

2. Blocker 87 sat in Jam 2, their time completed during Jam 3.

2		125			50			87	-			34			911		
3		42			99			87	\$			5150			9999		

3. Blocker 87 sat for a first penalty in Jam 2, their time completed during Jam 2. Blocker 87 returned for a second penalty and sat in Jam 2, their time completed in Jam 3.

2		125			50			87	+ -			34			911		
3		42			99			87	\$			5150			9999		

4. Blocker 87 sat in Jam 2, their team had a Star Pass, then their time completed during Jam 2.

2		125			50			87	-			34			911		
SP	X	50			125			87	\$			34			911		

5. Blocker 87 sat in Jam 2, the opposing team had a Star Pass, then their time completed during Jam 3.

2		125			50			87	-			34			911		
SP*																	
3		42			99			87	\$			5150			9999		

6. Blocker 87 sat in Jam 2, their team had a Star Pass, then their time completed during Jam 3.

2		125			50			87	-			34			911		
SP	X	50			125			87	S			34			911		
3		42			99			87	\$			5150			9999		

7. Blocker 87 sat after Jam 2 ended but before Jam 3 started, their time completed during Jam 3.

2		125			50			87				34			911		
3		42			99			87	\$			5150			9999		

8. Blocker 87 sat before Jam 2 started, continued through Jam 3, their time completed during Jam 4.

2		125			50			87	S			34			911		
3		42			99			87	S			5150			9999		
4		7			50			87	\$			911			0118		

9. Blocker 87 is in Jam 2 as the 4th Blocker, the Jam ends, and then Jam 3 starts with 87 in the Penalty Box and 99 as Pivot.

2	X	125			87	-		50			34			911		
3		42			99			87	\$		5150			9999		

10. Blocker 87 sat in Jam 2 and was fouled out or expelled, their time completed during Jam 2.

2		125			50			87	+		34			911		
---	--	-----	--	--	----	--	--	----	---	--	----	--	--	-----	--	--

11. Blocker 87 sat in Jam 2 and was fouled out or expelled, their time was not completed in Jam 2. Blocker 375 was brought in as a substitute between Jams and the time completed in Jam 3.

2		125			50			87	-		34			911		
3		42			99			375	\$		5150			9999		

12. Injury to Blocker 87 forced the call off of Jam 2.

2		125			50			87	3		34			911		
---	--	-----	--	--	----	--	--	----	---	--	----	--	--	-----	--	--

13. Blocker 87 sat in Jam 2 while actively bleeding, their time was not completed in Jam 2. Blocker 375 was brought in as a substitute between Jams and the time completed in Jam 3.

2		125			50			87	- 3		34			911		
3		42			99			375	\$		5150			9999		

14. Both teams completed a Star Pass during Jam 2. (Blue team shown first, red team second)

2		125			50			87			34			911		
SP	X	50			125			87			34			911		
2		33			513			667			7253			09		
SP	X	513			33			667			7253			09		

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Penalties-Lineups

The Penalties-Lineups sheet is used when combining the roles of Penalty Tracker and Lineup Tracker into a single person assigned to each team. The forms provided in the StatsBook are print-only forms and any postgame data entry must be done through the individual Penalties and Lineups sheets.

- Form header: Fill in the Penalty-Lineup Tracker name at the top of the form. If the printed sheet does not already have it, also fill in the team name, team color, and date.
- **Roster:** The roster should be pre-populated with the Skater roster numbers.
- There are multiple ways to fill this form out correctly, so careful discussion of expectations should happen between the Head NSO and Penalty-Lineup Trackers before the game. The most common methods are described here.
 - (Left/blue) Lineups section:
 - Option 1: Complete exactly to the standards of the Lineups paperwork, as described in the [Lineups](#) section of this document.
 - Option 2: Enter the penalty code for the penalty committed in the Box field next to the Skater's number.
 - (Right/pink) Penalties section: Complete exactly to the standards of the Penalties paperwork, as described in the [Penalties](#) section of this document. Penalty totals for each skater can be written in the margin to the right of the Penalties section.
- Halftime responsibilities:
 - Before Period 2, transfer the penalties from Period 1 by shading in the same number of fields of the Period 2 sheet.
 - Transfer any Skaters who will start Period 2 in the Penalty Box to the Period 2 sheet.

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Expulsion-Suspension Form

- **Game Date:** If not printed out with the form, write in the date of the game.
- **Teams Participating:** If not printed out with form, write in the participating teams in the format: (Home League Name) (Team Name) vs. (Visiting League Name) (Team Name)
- **Suspension Recommended Below:** This is required data. The person in charge of the document should circle "Yes" or "No" depending on whether a suspension has been recommended in any of the Individual Statements. Must be marked Yes if there are any Yes recommendations in the Individual Statements, and marked No only if everyone agrees No suspension.
- **Meeting Results (if held):** For WFTDA Tournaments, the designated WFTDA Games Tournament Oversight (GTO) should include a short description of the results of the expulsion/suspension meeting.
- **Individual Statements:** There are boxes for statements by the Official witnessing the action, the Head Referee (required), the expelled Skater, both team Captains (required), Tournament Head Referee (tournament only), and Games Tournament Oversight (tournament only, if available). Each individual needs to fill out the following information in their section:
 - **Name:** Print the legal and derby name of the person making the statement.
 - **Signature:** Sign the document.
 - Everyone filling out the form must include their signature. At a minimum, this should be the Head Referee and both team Captains.
 - If the expelled Skater was the Captain for the game, a team's Alternate may sign the form as Captain.
 - Signatures mean all persons involved received and read the form. A signature does not mean or imply agreement with the statements of others.
 - **League Affiliation:** Write the name of their affiliated league.
 - **Penalty Issued:** Write the name and penalty code of the expulsion-worthy penalty.
 - **Contact Information:** Write an email address and phone number where they may be reached.
 - **Suspension Recommended:** Circle "Yes" or "No" to show whether a suspension is recommended.
 - Everyone signing the form must write whether they recommend a suspension or not, with the exception of the expelled Skater and Official witnessing the action.
 - **Comments:** Detailed description of what the person witnessed, if anything. If anyone needs more space to write, they may continue onto the back of the paper or on a separate sheet as needed.
 - The expelled Skater must clearly be identified in the description of the action, which means including either the Skater's name or the team name and Skater roster number. More information is better.
 - Statements are not required, except for the Official witnessing the action.

- Statements are strongly encouraged, to communicate your understanding of the event at that time. For example: "I agree with the HR's statement" or "I did not see the action."

Official Reviews

The Official Reviews sheet is a part of the usual StatsBook submission for a sanctioned game. It is optional, but strongly encouraged, to use this sheet in a game. Any Official at the Official Reviews may fill out this sheet, but a Referee or NSO alternate typically does it. This sheet may provide information if there is a Skater expulsion or a suspension request. If used, this sheet should be scanned and sent in with the signed scanned IGRF and Expulsion-Suspension Form.

- **Form Header:** Fill in the Tracker's name at the top of the form. If the printed sheet does not already have it, also fill in the team names and date.
- **Team:** The name of the team using this review. Write reviews in the order in which they happen during each period.
- **Jam:** The number of the Jam that has just ended when the review is called.
- **Period Clock:** The time shown on the Official Period Clock on the scoreboard when the review was called.
- **Length of Review:** The amount of timeout time shown on the scoreboard when the review ended.
- **Keep Review?:** If the Head Referee says that the team's first review for the period has been retained because the team won the review, circle "Yes." If the review was not retained or it is that team's second review for the period, circle "No."
- **Details:** Summarize what the team is asking to review and any other information about the action being reviewed.
- **Result:** Provide the Head Referee's decision on the review and any supporting explanation.
- **Total Time Elapsed for Official Reviews:** Total the summary of the Length of Review data for each period.

Game Clock

The Game Clock sheet keeps a record of certain game events. It is optional, and the Period Timer or NSO Alternate, if one is used, should fill it out. This sheet may be useful for answering some questions if other paperwork contains errors, particularly the "Call" column of the Score sheet.

- **Form header:** Fill in the Period Timer name at the top of the form. If the printed sheet does not already have it, also fill in the team names and date.
- **C/A Name:** Fill in the names of the Captain and Designated Alternate for each team.
 - If a team must select a new Captain mid-game, write the new Captain's name in the margin, and label it "New Captain in Jam #".
- **Timeouts Taken:** Whenever a team takes a timeout, write the time on the Period Clock that the timeout occurs.
- **Review:** Whenever a team takes an Official Review, write the time on the Period Clock that the review occurs. If the Head Referee says that the team does not retain the first review, cross out the second box.
- **Jam:** Write down each Jam number.
- **Jam Time:** Write down how long each Jam lasts, in M:SS.
- **Pack Laps:** Each time the pack completes a lap during a Jam, make a tally mark here to count the number of laps completed. Use fractions show how much of the final lap was completed.
- **Event:** Write the code for any event(s) that occur during or after this Jam. If multiple events occur, list all in the field, like: INJ, OFF, OR
 - TO - Team Timeout, occurring after the current Jam for the current line.
 - OR - Official Review, occurring after the Jam for the current line.
 - INJ - If the Jam for the current line ended because of an injury.
 - EXP - If a Skater is expelled during or after the Jam for the current line.
 - OFF - Official Timeout, occurring after the Jam for the current line.
- **Team/Skater:** Write the team or Skater that an event applies to as well as the time on the Official Period Clock.
 - TO - Write the color of the team that requested the timeout and the time on the Official Period Clock.
 - OR - Write the color of the team that requested the Official Review and the time on the Official Period Clock.
 - INJ - Write the color and roster number of the Skater that the Jam was called for.
 - EXP - Write the color and roster number of the expelled Skater.
 - OFF - Write the time on the Official Period Clock.
- **Laps/Min:** Leave blank, the StatsBook will calculate this.
- **Pts/Min:** Leave blank, the StatsBook will calculate this.

Halftime responsibilities: In the Timeouts Taken section of the second period sheet, cross out all timeouts used in the first period.

Notation Examples for Game Clock

1. In Period 1, Blue team takes 1 Timeout and 1 Official Review (not retained), and Red team takes 2 Official Reviews.

End of Period 1:

TIMEOUTS TAKEN			REVIEW		TEAM
24:37			11:18	 	Water City Roller Derby / All-Stars
			18:23	4:29	Toaster City Rollers / Toasts of the Town

Start of Period 2:

TIMEOUTS TAKEN			REVIEW		TEAM
 					Water City Roller Derby / All-Stars
					Toaster City Rollers / Toasts of the Town

2. Jam 2 is called off for an injury to Blue 71.

2	:23	3/4	INJ	Blue 71
---	-----	-----	-----	---------

3. After Jam 4, the Blue team calls a Timeout.

4	:57	1 1/4	TO	Blue, 24:37
---	-----	-------	----	-------------

4. After Jam 7, the Red team requests an Official Review.

7	1:09	1 1/1	OR	Red, 18:23
---	------	-------	----	------------

5. After Jam 20, an Official Timeout is called and then Red 513 is expelled.

20	1:37	1 1/2	OFF, EXP	6:53, Red 513
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Penalty Box

The Penalty Box sheet acts as a log for Penalty Box Timers to track Skaters' turns in the Penalty Box throughout the game, as well as an aid for Penalty Box Timers using the single stopwatch timing method. This paperwork is provided as a potential tool for use in games. **No postgame data entry is required.**

- **Form header:** Fill in the Penalty Box Timer name at the top of the form. If not already populated on the printed sheet, also fill in the team name, team color, and date.
- **Period:** Write the current period (1 or 2) when the Skater is seated in the Penalty Box.
- **Jam:** Write the current Jam when the Skater is seated in the Penalty Box. If the Skater is seated between Jams, the upcoming Jam should be indicated.
- **Btwn Jams:** (Between Jams) If a Skater sits down in the Penalty Box between Jams, mark this column with an X.
- **Team:** Write the color of the team being timed here.
 - Note: In the situation where only the team listed in the Form Header is being timed on that sheet, it is acceptable to leave this blank.
- **Skater #:** Write the jersey number of the penalized Skater.
 - In the situation where a substitution is made due to an injury, foul out, or expulsion, the Skater serving the penalty should be listed here with a note in the margin next to the row indicating the roster number of the Skater who received the penalty ("serving for ##").
 - If the original Skater's number is already recorded here, a slash ("/") and the number of the substitute can be added after it, rather than erasing. This would appear as: [original Skater #] / [substitute Skater #]
- **Pos:** (Position) Write the position of the Skater serving the penalty.
 - B - Blocker
 - P - Pivot
 - J - Jammer (active or inactive)
- **In:** Write the time on the timer's stopwatch or other timing device when the Skater sits in the Penalty Box.
- **Stand:** The time on the watch when the Skater should be told to stand, which is 10 seconds before the time listed in "Done."
 - Jammer Penalty - During a Jammer swap, the Jammer may stand for fewer than 10 seconds or not at all. The final time recorded here is when the Jammer actually stands in the game, or it should be blank if the Jammer did not stand. If a Jammer swap occurs and the expected time to stand is written in so the person recording can also time the Jammer, cross it out to indicate that the Jammer left the Penalty Box before it was time to stand.
- **Done:** The time on the watch when the Skater should be told their penalty is done. When a Blocker has a single penalty, this should be 30 seconds after the time listed for "In." Each additional penalty being served at the same time will add 30 seconds to this time.

- **Jammer Penalty** - During a Jammer swap, a Jammer will spend less than 30 seconds in the Penalty Box. The final time recorded here is when the Jammer penalty is actually done in the game. If a Jammer swap occurs and the expected time that the penalty is done is written in so the person recording can also time the Jammer, cross it out and write the actual time the penalty is done if the Jammer's penalty is shortened. When the Jammer is the second Jammer in a swap, the expected time will already reflect the shortened penalty.
- **Time at End of Jam:** When Skaters are still in the Penalty Box when a Jam ends, write down the time the stopwatch or other timing device shows when it is stopped.
- **Jam #:** Jam numbers are listed to optionally allow easier tracking of the current Jam. The column to the left is for the first period and the column on the right is for the second.
- **Total Penalties:** The roster of Skater numbers for the team being tracked should be printed in the shaded blocks. If not, write in the Skater roster numbers to match the order on the penalty tracking sheet. When a Skater comes into the Penalty Box to serve a penalty, make a tally mark under the Skater's roster number for each penalty being served during that trip. This should correspond to the current penalty count for that Skater.
 - In case of a substitution, the tally should always be marked for the Skater who was assigned the penalty, not the Skater serving it.

Other Situations

- **Skater leaving early** - Indicate the time when the Skater left along with the note "Left Early". When the Skater returns to the Penalty Box, add a new line for the remaining time and additional penalty, if applicable.
- **Skater sat in error or penalty overturned** - Draw a single line through the row for that trip and note either "No penalty" or "Penalty overturned" then erase the tally mark from the Total Penalties section since there is not a penalty that corresponds to this trip.

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Notation Examples for Penalty Box

1. In Jam 5, Blue 5150 sits in the Penalty Box, 22 seconds later, Jam 5 ends. Between Jams, Blue 666 sits in the Penalty Box.

1	5		Blue	5150	P	0	20	30	22		
1	6	X	Blue	666	B	22	42	52			

2. In Jam 8, Blue Jammer 125 sits in the Penalty Box. 17 seconds later, Red Jammer 71 also sits in the Penalty Box.

1	8		Blue	125	J	0		17			
1	8		Red	71	J	0	7	17			

3. In Jam 4, Blue 50 sits in the Penalty Box, but it is determined that they were not sent to the Penalty Box for a penalty.

No Penalty

1	4		Blue	50	B	0	20	30			
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4. In Jam 20, Red 513 is assessed a penalty, but Red 95 serves the penalty as a substitute due to the injury, foul out, or ejection of 513.

Serving for 513

1	21	X	Red	95	B	12	32	42			
---	----	---	-----	----	---	----	----	----	--	--	--

or

1	21	X	Red	513 / 95	B	12	32	42			
---	----	---	-----	----------	---	----	----	----	--	--	--

5. In Jam 4, Blue 125 sits in the Penalty Box, but leaves 24 seconds later, without being dismissed. Later in Jam 4, Blue 125 returns to the Penalty Box to serve the remaining time and additional penalty.

Left Early :24

1	4		Blue	125	B	0	20	30 24			
1	4		Blue	125	B	0	26	36			

Postgame Data Entry

There is a particular order to performing the StatsBook data entry after a game, transferring the data from the game paperwork to the electronic file. Following the correct order will ensure accurate entry and allow for more robust error-checking.

The correct order is:

1. Complete the IGRF, making any corrections or filling in any data gathered at the game. Do not enter period totals for points or penalties. These fields will be populated from the Score and Penalties sheets
2. Complete the Score sheet, Periods 1 & 2. (Jam numbers flow from Score to Lineups and Game Clock.)
3. Complete the Penalties sheet, Periods 1 & 2.
4. Complete the Lineups sheet, Periods 1 & 2. (Double-check the Jammer and the Jam numbers arriving from Score.)
5. Complete the Game Clock sheet, if used, Periods 1 & 2.

General Hints for Data Entry

Data Entry and Error-checking

Using the 10-key keypad makes doing data entry faster, particularly on the Score and Lineups sheets. Consider doing your data entry in columns, using the 10-key keypad as much as possible, and then checking for entry errors viewing row-by-row.

Moving Between Worksheets Using the Keyboard

Switching between worksheets with keyboard shortcuts is faster than using the mouse, and much more gentle on one's wrists.

To move to the next worksheet to the RIGHT:

- Win: Control +PgDown
- MacOS: Fn+Control+Down Arrow

To move to the next worksheet to the LEFT:

- Win: Control +PgUp
- MacOS: Fn+Control+Up Arrow

Data Entry for Unusual Circumstances

If a scenario occurs that cannot be captured accurately using the form fields given (usually indicated by large amounts of margin notes on the written paperwork, such as: a Skater with more than 3 trips to the Penalty Box in a Jam, more than 4 Blockers participating in a Jam, and so on) represent the information as accurately as possible using the fields available and provide additional information using the "Comment" feature in the spreadsheet. Any comments added should be set to "show".

IGRF Data Entry

This sheet begins the flow of data to the rest of the StatsBook.

Up to 20 Skaters' names may be entered for a team on the IGRF. This does not mean that more than the maximum number of Skaters allowed by Sanctioning, or the number agreed to by both teams for regulation, may participate in a game, but it is not required to identify that a particular Skater is an alternate or did not skate in order to fill out the IGRF. However, knowing that can reduce errors during data entry.

If you have more Skaters on the IGRF than were rostered for the game, do mark which Skaters did not actually skate in the game by adding an asterisk ("*") after their roster number (e.g., 7253 becomes 7253*) and formatting the Skater's number and name with a strikethrough. By including the *, if you incorrectly try to enter that roster number on the Score or Lineups sheet, the conditional formatting that highlights invalid Skater numbers may catch it. For example, if Skater 25 is no longer on the game roster, their number should be changed to 25* on the IGRF and if you accidentally type "25" into the Lineups when you meant "250", the conditional formatting will highlight the "25" as an error.

Data to Enter on IGRF Sheet

- Make any changes to Section 1 entries created during pregame preparation.
- **Suspension:** If there was any expulsion or suspension activity during the game, enter YES or NO in the field, as needed. If there was no expulsion or suspension activity during the game, leave unchanged.
- **Color:** The color each team as called by Officials during the game. Since this may be a game-time decision by the Head Referee, confirm the colors actually used for Verbal Cues during the game here. This data populates from here to rest of the StatsBook.
- Brief Expulsion/Suspension notes should be entered in Section 2. The notes must include: team name, Skater roster number, the period and Jam when the penalty occurred, the penalty name the expulsion was issued for, and if a suspension was recommended. The detailed report will be included with the scanned signed Expulsion-Suspension Form.
 - NOTE: Entering data in these Expulsion fields in Section 2 will overwrite the default labeling. That is intended behavior.
- Enter 'yes' if the Official Score required adjustment) and enter a brief description for the reason the adjustment had to be made.
 - There is also required data entry on the OS Offset sheet
- The rest of Section 2 can be confirmed after the Score and Penalties sheets have been entered and verified.
- In Section 3, enter the names of the Team Captains, Head Referee, and Head NSO in the appropriate fields. Use the same names as used elsewhere on the IGRF. Copy/Paste Special... Value is the best way to transfer this data easily and accurately.
- Confirm the final Officials rosters in case of pre- or mid-game changes.

Error Checking the IGRF Sheet

- Confirm final Skater lineup against the Score, Penalties, Lineups and other worksheets to confirm that non-rostered Skaters are not being included in the game data and any listed Skaters who did not make the final game roster are clearly marked with an * and strikethrough.
- Once the rest of the StatsBook is filled out, confirm the period total points and penalties for each team in Section 2 against the hard copy that was signed after the game to ensure that the signed IGRF is correct. If it isn't correct, you will have to get a corrected IGRF signed for this WFTDA-Sanctioned game.
- Incorrectly entered Skater roster numbers are the most common cause of errors in other parts of the StatsBook, particularly on the Game Summary and Penalty Summary sheets. Verify their accuracy, ensuring they do not have stray space characters, and that their cells are formatted as Text, and that any leading zeros are being displayed. Re-typing any numbers on the IGRF when they cause errors or missing data on other sheets often clears things up.
- The IGRF will display a #VALUE! error in Section 2 if the OS Offset sheet has been used AND a non-numeric character exists in the Official Score Offset +/- column a row with a valid Jam number.

Score Data Entry

Data entry of the Score sheet is critical for providing some information used on other sheets, as well as calculating the game scoring.

Data to Enter on Score Sheet

- Confirm the header information from the IGRF for accuracy. Correct on the IGRF, when possible.
- **Scorekeeper:** Provide the name of the Scorekeeper for each team for each period. Make sure that these correspond per period as Scorekeepers typically change teams in the second period. Use the same name as the Scorekeeper used on the IGRF. Copy/Paste Special... Value is the best way to transfer this data easily and accurately.
- **Jammer Referee:** Provide the name of the Jammer Referee for each team for each period. Make sure that these correspond per period as Jammer Referees typically change teams in the second period. Use the same name as the Jammer Referee used on the IGRF. Copy/Paste Special... Value is the best way to transfer this data easily and accurately.
- **Jam:** The Jam column will be used to populate the Jam numbers appearing on the Lineups sheet, as well as to calculate how many Jams occurred in the game. Enter the Jams in sequential, numerical order. If there is a Star Pass, it should appear on a separate row with SP (or SP*) for the Jam number.
 - Hint for faster Jam # entry: Enter Jams 1 & 2. Then highlight both cells ONLY. Move the cursor over the little black square at the bottom right corner of the selection rectangle (the cursor will change shape to a thin black cross), then press & drag straight down until you have all the Jam numbers needed.

- If there were Star Passes, you will need to adjust the Jams manually (using Copy/Paste Special... Value), and enter the appropriate SP/SP*.
- You may copy the Jam numbers from the Home Team to the Visiting Team (for each period) by selecting them, then using Copy/Paste Special... Value into the first Jam # cell for the Visiting Team. Then adjust any SP and/or SP* values as necessary.
- **Jammer's Number:** Enter the roster number of the Jammer for each Jam. This information will also populate the Jammer column of the Lineups tab. Any errors regarding which Jammer was actually in a particular Jam need to be reconciled, and any correction applied here, on the Score sheet.
- **Lost/Lead/Call/INJ./NI columns:** If they occurred in the Jam, the corresponding field should be marked with an "X".
 - Marking NI verifies that the lack of data in the scoring trips is accurate and not an oversight. If this field is marked, any points entered in the scoring trips will be ignored by the StatsBook for the Jam Total, which impacts the Game Total.
- **Trip #** - For each scoring trip, enter the number of points the Jammer earned in that trip. If a scoring trip is begun but no points are scored, enter 0. Notice that the trip numbers begin with 2. Trip 1 is the Initial Trip.
 - During an Overtime Jam, any points awarded during an Initial Trip should be recorded in the Trip 2 column as such: = [Initial Trip pts] + [second trip pts]. For example, 4 points on the Initial Trip and 2 points on the second trip would be entered in the cell as "=4+2". The = allows the file to calculate the total value, and it would appear in the cell as 6, but the formula will still show =4+2 when selected.
 - More than 9 Scoring trips: Scoring for Jams with ten or more scoring trips should be recorded in the Trip 10 column as: = [ninth Scoring Trip pts] + [tenth Scoring Trip pts]...

Calculated Fields on Score Sheet

The following fields will automatically calculate results based on the data entered into the score tab.

- Jam Total – Total points for each Jam (if NI not marked for that Jam).
- Game Total – Running total of the score for the entire game.
- Period Totals – This row provides total for each column of the Score sheet.

Error Checking on Score Sheet

- Confirm that the scores calculated by the StatsBook agree with the scores calculated during the game that were entered on the signed IGRF (Section 2). If they do not, first confirm that everything is entered properly in the StatsBook, and that you didn't accidentally mark the NI column in a Jam where points were scored. If data was accidentally entered into a NI field, make sure you clicked in the cell and pressed the delete key. If you replaced an accidental mark with a space character, for instance, the StatsBook will interpret it as a mark and continue to not count the points from that Jam.
- Confirm the accuracy of data entered in the Lost/Lead/Call/INJ./NI columns; stray characters (including a space character) may cause Skater stats to be incorrectly calculated.

- If it turns out that the score on the signed IGRF does not match the total calculated on the Score sheet and no Score Correction was indicated on the signed IGRF, let both team Captains, the Head Referee, and Head NSO know right away, as you will need to prepare a new IGRF with the score correction noted for them to sign. The OS Offset sheet should be used to fix the score issue when you determine where it occurred.
- Confirm that the Jammers entered in the Jammer's Number row agree with the Lineups sheets. The StatsBook will automatically populate the Jammer column of the Lineups sheet, but you should still confirm that those numbers correspond.
- For roster numbers entered that do not exist on the IGRF, the cell background will turn red (Excel 2010 and higher only.)
- If a Scorekeeper was unable to determine when Jams were called and has not marked the Call field, you may reconstruct data from the Game Clock sheet, if you had someone fill that out during the game. Any Jam that ran fewer than two minutes and was not called for an unusual cause, like an Injury, should have a corresponding mark in the Call field of the Lead Jammer for that Jam. Thus you may determine where to place the Xs even if the Scorekeeper was unable to.
- Values in the Game Total columns that do not appear to match what appears on the Score sheet may be reflecting adjustments from the OS Offset sheet. Make certain those are accurate, if they exist.

Lineups Data Entry

This provides data about Skaters and their positions during a given Jam. It provides the foundation for calculating many of the stats, including +/- and Versus Team Average Rating (VTAR).

Data to Enter on Lineups Sheet

- Confirm the information populated from the IGRF and Score for accuracy. Correct on the IGRF or Score, when possible.
- **Lineup Tracker:** Enter the name of the Lineup Trackers of each team for each period. Use the same name as the Lineup Tracker used on the IGRF. Copy/Paste Special... Value is the best way to transfer this data easily and accurately.
- **No Pivot:** Mark this field with an "X" if the team did not field a Pivot for the Jam. The Pivot field will be treated as a Blocker for game statistics.
 - During a Star Pass: Mark this field with an "X", as the original Jammer is now a Blocker and the former Pivot is now a Jammer.
- **Jammer/Pivot/Blocker:** Enter the number of each Skater in a field that matches their position. Jammer numbers should have populated from the Score sheet; double-check for accuracy. If the team does not field a Pivot, with the no Pivot field marked, the Pivot column is treated as a 4th Blocker column for calculating game statistics.
 - See the in-game Lineups instructions for correct Star Pass procedures to be followed.
 - If the lineup tracker has marked a field with "?" or "n/a", that means the tracker either missed a Skater number or the team did not field a full pack, respectively. To address this in data entry, leave the field blank and add a cell comment regarding the

situation. Set the cell to "Show Comment" to make it easy for anyone reviewing the file later.

- If the paperwork is marked with "?" (there was a Skater in that position, but the Lineup Tracker could not record the Skater's number), first check the paperwork for other NSO positions or video if it is available and of useful quality. If the missing number was a Jammer or Pivot, the Score sheet may have that information. If the skater committed a penalty or was in the Penalty Box during that jam, the Penalties or Penalty Box sheets may have that information. If the number can't be determined by other means, the cell comment should read "Missed Skater number".
- If the paperwork is marked with "n/a" (the team did not field a Skater in this position), no further investigation is needed and the cell comment should read "Skated short".
- **Box:** Enter the notations representing Penalty Box entry and exits.
 - The - is the minus sign.
 - The + is the plus sign.
 - The S is a capital s.
 - The \$ is the US Dollar sign.
 - Using the Caps Lock key may speed up this data entry.
 - Characters (\$) which may be difficult to enter with your keyboard may be Copy/Paste Special... Value into these fields.

Error Checking on Lineups Sheet

- Confirm the Jam numbers, even though they are populated from the Score sheet, to check whether a Scorekeeper or a Lineup Tracker missed a Star Pass.
- Confirm the Jammer Numbers with the Score sheet. Inaccurate Jammer numbers must be corrected on the Score sheet, where they are populated from.
- For roster numbers entered that do not exist on the IGRF, the cell background will turn red (Excel 2010 and higher only.)

Penalties Data Entry

Data to Enter on Penalties Sheet

- Confirm the information populated from the IGRF for accuracy. Correct on the IGRF, when possible.
- **Penalty Tracker:** Enter the name of the Penalty Tracker. Use the same name as the Penalty Tracker used on the IGRF. Copy/Paste Special... Value is the best way to transfer this data easily and accurately
- **Penalty/Jam #:** For each Skater, enter each penalty they received, penalty code (in CAPITAL LETTERS) on top, Jam number on the bottom. Enter only the Period 1 penalties on the Period

1 sheet. For the Period 2 sheet, enter only the penalties committed in Period 2, leaving blank the fields for penalties committed in Period 1. Conditional formatting should mark the fields for penalties committed in Period 1 (see below for troubleshooting).

- **Non-Skater Expulsions:** Penalties associated with the expulsion of a non-skating member of the bench staff (which are not otherwise assigned to the team Captain) are noted here. The name of the staff member should be entered in the shaded block and penalties should be noted in the same way as the rest of the Penalty/Jam # section.
- **FO/EXP:** Foul Outs (FO) for accumulated penalties should be marked as "FO" in the top row and the Jam that the 7th penalty was recorded in should be marked in the bottom row. Expulsions should be listed with the appropriate penalty code in the top row and the Jam when the penalty occurred in the bottom row. Expulsion penalties should also be recorded in the Penalty/Jam # section for that Skater and should have been noted in the IGRF sheet.

Calculated Fields on Penalties Sheet

- **Total:** The total number of penalties (not including the foul outs and expulsions listed in the FO/ EXP column) for each Skater per period.
- **Total Penalties For Period:** The total number of penalties committed (not including the foul outs and expulsions listed in the FO/EXP column) by each team for that period. This also includes Non- Skater Expulsions.

Fields to Skip on Penalties Sheet

- **Notes:** This area is free for Penalty Trackers to use in a way that most helps them, and it is not connected to any calculations.
- **Jam # Tracker:** The Jam number tracker in the center of the page (in the notes section) is for use only during the game by the Penalty Tracker.

Error Checking on Penalties Sheet

- Ensure that penalties are only listed for the appropriate number of rostered Skaters according to the Sanctioning Policy for a sanctioned game or game contract for a regulation game.
- Confirm that the penalties calculated by the StatsBook agree with the penalties calculated during the game which were entered on the signed IGRF (Section 2). In the case of a mismatch, each Skater's penalties for the incorrect team/period should be compared to the written sheets.
 - If the electronic forms are incorrect, correct them before submitting to WFTDA.
 - If the signed IGRF is incorrect, a new IGRF will have to be created and signed by all parties before submitting to WFTDA.
- To confirm that a Jam number for a penalty is correct, first check the Lineups paperwork and ensure that a Skater was participating in that Jam. Then verify using the BOX column on the Lineups sheet and the Penalty Box sheet paperwork to ensure that Skater went to the

Penalty Box in that Jam. In Jams with full Penalty Boxes, Skaters may not serve their penalty time in the same Jam as the penalty was assessed.

- Symptom: Penalties for a given Skater are not being calculated accurately on the Game Summary or Penalty Summary sheets. The most common cause is a space character before or after the penalty code. Check each field with a penalty entered for the Skater with missing penalties and delete any space character that occurs before or after the penalty codes.

Fixing Conditional Formatting on Penalties Sheet

Excel files with Conditional Formatting don't always behave as desired. To restore the conditional formatting on the Penalties Sheet to a nicer, expected status, follow these instructions.

Using Excel, from the Penalties sheet:

1. In the Ribbon, in the Home command tab, click the Conditional Formatting button's drop-down arrow.
2. Click Manage Rules.
3. In the Show formatting rules for: drop-down, select This Sheet.
4. Click the rule you wish to edit, then click the Edit Rule... button.
5. Change that #REF!#REF! to B4, so it now reads "NOT(ISBLANK(B4))".
6. Click OK to confirm changes and exit the Edit Rule dialog box.
7. Click OK to confirm changes and exit the Manage Rules dialog box.

Using Libre Office, from the Penalties sheet:

1. In the Format Menu, choose Conditional Formatting > Manage...
2. Select the first (only) thing there, which should read "AT44:AU45, AS4:BA43, AE44:AF45, AD4:AL43" for range and the "Formula is NOT (ISBLANK (#REF! #REF!))".
3. Click Edit, and change that #REF!#REF! to B4, so it now reads "NOT(ISBLANK(B4))".
4. Click OK to confirm changes and exit the edit dialog box.
5. Click OK to confirm changes and exit the manage dialog box.

Penalties-Lineups Data Entry

If you used the combined Penalties-Lineups sheet during the game, all game data should be entered into the separate Penalties and Lineups sheets, per the instructions provided in the [Penalties Data Entry](#) and [Lineups Data Entry](#) sections. If the Penalty-Lineup Tracker used option 2 or something similar for the Lineups section of the paperwork, Penalty Box entries and exits will need to be recreated using the Penalty Box paperwork for the game.

OS Offset Data Entry

The OS Offset sheet allows calculated corrections to the Official Score to be recorded in the StatsBook in case a scoring error becomes part of the Official Score. In the event of a scoring error which persists for too long, the Score sheet should still faithfully display the points and trips actually awarded during the game, as this data impacts individual Skater statistics. Data entered on the OS Offset sheet intentionally creates an offset (+/-) to the Official Score which will be reflected in Period and Game Totals on the IGRF and Score sheet.

If there is no change required to the Official Score (all scoring on the Score sheet accurately reflects the Official Score), then this sheet will be left blank.

Data to Enter on OS Offset Sheet

- Confirm the information populated from the IGRF for accuracy. Correct on the IGRF, when possible.
- **Official Score Offset +/-:** Enter the numeric value required to change the Official Score to reflect what was publicly displayed during the game. Changes to increment should be entered as positive whole numbers. Changes to decrease the Official Score should be entered as negative whole numbers (e.g., "-2"); negative numbers will be displayed in red, inside parentheses on this sheet. Ensure these changes are made on the Jam where the error occurred.
- **Description:** Enter a description of the reason which requires this change to the Official Score.

Error Checking on OS Offset Sheet

- Ensure that any offsets are entered accurately.
- Ensure that no false or inadvertent entries have been created in the Official Score Offset +/- column. Any non-numeric entry (text or a space character, for instance) will cause #VALUE! errors in the IGRF Section 2.
- Verify that any offsets entered are accurately reflected in the relevant Score sheet(s) and the IGRF Section 2.

Game Clock Data Entry

Data to Enter on Game Clock Sheet

- Confirm the information populated from the IGRF for accuracy. Correct on the IGRF, when possible.
- **Period Timer:** Enter the name of the Period Timer. Use the same name as the Period Timer used on the IGRF. Copy/Paste Special... Value is the best way to transfer this data easily and accurately.

- **C/A Name:** Fill in the names of the Captain and Designated Alternate for each team.
- **Timeouts Taken:** As timeouts were requested by a team, record the time that they occurred on the Official Period Clock. All timeouts used in the first period should be marked with "X" for the second period.
- **Review:** For each period, when an Official Review was requested by a team, record the time that they occurred on the Official Period Clock. Repeat for the second Official Review, if they retained their first challenge for a period. If they did not retain their review, mark the second Official Review box with "X".
- **Jam Time:** Enter how long each Jam lasted, as total number of seconds. For example, a one minute twenty-seven second Jam would be entered as 87.
- **Pack Laps:** Enter the count of the number of laps completed in each Jam. Decimal fractions may be used to indicate how much of the final lap was completed as well.
- **Event:** Indicate the code for any event(s) that occurred during or after a Jam. If multiple events occurred, list all in the field, like: INJ, OFF, OR
 - TO - Team Timeout, occurring after the Jam for the current line.
 - OR - Official Review, occurring after the Jam for the current line.
 - INJ - If the Jam for the current line is ended as the result of an injury.
 - EXP - If a Skater is expelled during or after the Jam for the current line. • OFF - Official Timeout, occurring after the Jam for the current line.
- **Team/Skater:** Indicate the color or Skater that an event applied to as well as the time on the Official Period Clock.
 - TO - Write the color of the team that requested the timeout and the time on the Official Period Clock.
 - OR - Write the color of the team that requested the Official Review and the time on the Official Period Clock.
 - INJ - Write the color and roster number of the Skater that the Jam was called for.
 - EXP - Write the color and roster number of the Skater who was expelled.
 - OFF - Write the time on the Official Period Clock.

Fields to Skip on Game Clock Sheet

- **Jam:** Populated from the Score sheet.
- **Laps/Min:** Leave blank, this is calculated by the StatsBook.
- **Pts/Min:** Leave blank, this is calculated by the StatsBook.

Error Checking on Game Clock Sheet

- Verify JAM TIME was entered as total seconds, not as M:SS.